Yi 2
7397
F 17

18.

Nutrition continued from p. 700

Female Constitution 714
Female mind —— 717
Catamenia —— 725
Male Constitution 742
Venereal appetite 754

& not the nerves

That the Arteries prepare & convey
nourishment to the body, I infer
1 From the great disproportion
between the brains of different animals
& their bodies. Eg: an Ox is six
times as large as a man, and
yet his brain is only 1/4 of the size
of that of a man's. Now if nourishment
were carried on by the nerves, ~~the brain~~
(where the nourishing matter is supposed
to be secreted) the size of the brain in all
animals would bear an exact ratio to
the size of their bodies.

2 Dumoras tells that in monsters in
whom the brain was very small, or

wholly wanting, - there appears to be no deficiency of life - or plumness in their limbs.

3 Those parts of the body in which the nerves are so small as hardly to be traced, grow as fast, and are as well nourished, as those in which the nerves are large & numerous.

4 Dr Monroe after cutting across the Sciatic nerve of a frog, did not find the limb a year afterwards in the least diminished in its size: wounds inflicted upon this limb, & even fractures on its bones, healed & united as readily as in other cases. Do not the arteries here performing the offices of the nerves vicariously? Why not if bones do of Ears?

V not reject the matter which nourishes
the body 2 But while I thus reject the opinion of
the Vegetas preparing the matter of nourishment for y body,
their agency is certainly necessary to render y aliments to pro-
=per it. In what manner I know not. Beginning with
substances which compose the food of man.

To ~~these~~ physiologists ~~add~~ ~~Colorious~~
~~matter and all of them~~ are of 20 heterogenous
a nature as to undergo a Decomposition by
the numerous animal processes they undergo
in the ~~the~~ body. They are all said to be com-
-posed of Carbon - Hydrogen & Oxygen with
a small Quantity of Azote. These are changed
by the animalizing ~~as they descend into the body~~ processes ~~thereby~~ in to
Azote, ~~That~~ which constitutes a material
part of Animal matters. Dr Cullen has
supposed Sugar to be the basis of nutrition in
any Other all aliments. How it is remarkable
Sugar yields by Chemical Analysis the
Carbon - Hydrogen & Oxygen which are
said to ~~by~~ furnish the materials of nour-
=ishment. 99 to 1 ~~100~~ 713 + The following is the
order of animal ~~&~~ principles Mucilage Glutin - Albumen
Gelatine & fibrin.
- Red matter.

5 The bones are tinged by madder, in young animals in such a manner as to become part of the bone, now it is not possible for this coloring matter to be conveyed by the nerves.

6 The kinds of matter are so various which are necessary for the body, that it is more probable that they are supplied by the heterogenous fluid, called blood — than by any not yet demonstrated nerves fluid. I have it from a fact I have heard of for the certain Crimes real or supposed they had up their arms the dying victim of all the kinds of the ever the first of them body is carried on by arteries — they should have the finest of them

I doubt that they do

I. I infer from a fact lately communicated to me of the practice of the Hindoos in India. One of their punishments for crimes is to oblige the culprit to keep one of the arms extended for several months. The arm is thus rendered emaciated, probably from the diminished supply of blood that is sent to it in consequence of its resisting its natural course. & the secretion of all the fluids in the body is carried on by arteries. Why so? Stary not secrete the matter which nourishes the body?

While I thus reject the nerves as the instruments of nutrition,

I admit this process to be essential
to the Actions performing that Office.
In what manner I know not. How-
=ever important the Actions appear in
this, and every other of the functions
of the body, they are by no means an
independant System. In Digestion, in
Vivification - Sanguification & Secretion
as well as in Nutrition they are tribu=
=tary to the ~~nervous system~~ nerves, and are
to perform any of those processes with=
=out them.

The Substances of which the nou=
=rishing matter of the body is composed,
consist of Carbon, Hydrogen - Oxygen

and ~~deposits~~ a small quantity of Azote.
The 3 ~~kinds~~ former age
~~they have~~ changed by the assimilating
processes into Azote which constitutes
principal
the part of animal exuviae. Sugar
is the most exhibitions of all aliments.
Now Sugar we know yields by a
Chemical Analysis the greatest quantity
of three matters which form Azote
and which I have said constitutes the
principal part of the solids & fluids
of the body. —

The nourishing matter of the
body I have said is probably a
secretion from the fibrin of the
blood.

All the parts of the body are said to be
renovated every seven years, but

the period is different in different ages.
It is most rapid in childhood &
slowest in old age. The nails and
hair are renewed every two months.

V they have been so much neglected
in all our Systems of Physic. Dr
Boerhaave overlooked them in ~~his~~
placing the proximate cause of all
diseases in the blood. Dr Cullen & Dr Brown have
lost sight of them in the extensive
view they have taken of the nervous
System. It becomes us to ~~the study of~~ the laboratory of my life
should be attended with any advantage
to medicine, it will be in consequence
of my having devoted myself chiefly to the
examination of the laws
& phenomena of the Sanguiferous
System, while I hope I have not neglected
overlooked the Discoveries of Dr Boerhaave
Dr Cullen & Dr Brown upon the respective bases
of their Systems of medicine. The matter

~~not equate the matter which occa-~~
~~-sion it to be~~

I hinted formerly at the Lymph being prepared for this purpose in the cavities of the body. — Perhaps this may be the case — but it is not necessary to admit, it in order to be-
-lieve that the nourishment of the body is carried on wholly by the arte-
-ries —

† This view I have given of the the nourishment of the body, you see is calculated to extend our ideas of the importance of the blood vessels in the Animal Economy. It has been the misfortune of Medicine that

which afford the principal part of the nourishment of the body, viz: aliments have been fully treated on. - To these some writers add Calcarious matter & of the a small portion
matter of light. I have taken notice of the use of fat as a nourishing Matter in case of Sickness. +

* In doing this, I shall first describe the peculiarities of ~~their~~ the female body & afterwards of the female mind. The Peculiarities of the body, are general & local. I shall begin with those wch are general.

* all the parts of the body are said to be renovated once in 7 years in different ages. It is more rapid in life, & slowest in old age. But the period is different I said formerly it is I said to consumed on different matters of nourishing matters. = the bone the Calcarious such as muscus - Sugar - and the hydro carbonated oxyd. Future experiments must determin its nature, & mode of application; + The hair in nails in 2 months the bones in 60 days.

+ It is supposed

"Hitherto we have considered those
functions in the Animal Oeconomy
which belong alike to the male &
female Constitution. We shall pro-
=ceed next to treat of the ~~[illegible]~~ those peec-
=uliarities which distinguish the one from
each other. —— I shall begin with
the Peculiarities of the
Female Constitution. ✓

In the 1st place under this head women in all Ages &
Conditions are in general less than the
men, and they acquire their growth several years
sooner than men. ~~[illegible]~~
2 The Texture of their simple solids
=particularly their bones
~~[illegible]~~ is less compact, than the bones
of men. This is so notorious that

V

3 The Cuticle of women is softer, as mother than in men, so much so as to more to the touch, than is felt by feeling the skin in men. This is evidently owing in part upon it. This softness & smoothness of this Skin has been ascribed to the greater activity of the Lymphatics which terminate under them Absorbing & carrying away all the Redundant salts which are thrown upon it. This greater activity of the Lymphatics is happily calculated to defend them from the inconveniences of their sedentary lives & many other Obstructions, to which they are more universal [illegible] exposed. The true Skin is softer & thin called [illegible] in women. 4 [illegible] beyond it, more open than in men.

5 The [illegible] cutaneous pores are less in women than in men. 20 is

6 the Heart. 7 The Liver is said to be larger than in men. It is in the inverse ratio of the size of the heart.

the bones of a female Skeleton, may be
known from the bones of a Male, by
certain fulci or furrows, which the
Arteries that lie near them im-
print upon the yielding Substance of
the bones. —

8 The Arteries in women possess
less Strength but
more contractility than the
Arteries of men. — hence they are more
subject to the Vibratility before mentioned.

— It depends upon a peculiar
degree of laxity in the Arteries which is
not common in the male Consti-
tution. — The internal Capacity of the bones is also greater in proportion to the
Arteries — and the internal the same in both sexes
hence greater disposition to Obesity.

9 The bones of women are

V I come now to mention the local peculiarities of the female body.

1 The Pelvis in women is wider than in men — hence they are able to retain their Urine longer than men. It is said to be of the same size in women of all sizes. The trochanters are wider apart than in men — hence they are unable to wear the small cloathing of men in all other respects of the same

2 Within this Pelvis is contained the Uterus or Womb provided with a various appendage of vessels &c which are accommodated to the formation & growth of a Fœtus —

3 The external Organs of generation are different from those of men.

4 There is within a certain number of years a discharge of blood every month this the Utero & Vagina. —

5 They are provided with a large glands on each breast which secretes milk for the nourishment of a child as soon as it comes into the world. —

more sensible of than the nerves
of men, and more susceptible of
impressions of mind & body - —

10 The brains of women are more
subject to nutrition of every kind than
the brains of men. Hence they are more
subject to nervous Diseases than men. 11 Women
perspire less than men. We have to add
the peculiarities of the female body, but
as any system of Physiology and
pathology includes the mind as well
as the body, the detail I am giving
will be imperfect without a corres-
=ponding history of the female mind.
I know that the difference between
the male & female mind has

6 The thorax & the abdomen lifs
moves more in respiration
in women than men – this is obvious in
female children of a years old. The design
of it is to favour the enlargement of the
uterus in gestation. –

7 The voice in females is more soft
& shrill than in males. –

8 They are more long lived than men – that is – more
women live to be old than men – owing to the natural influence &
softness requiring more time to become solid & then to decay.

9 It is of consequence for a physician
to know wherein it consists in order to
accommadate not only his prescriptions
to this mental diseases, but to conform
his manners and Conduct to this taste –
for they are the principal avenues to business &
reputation in the profession of medicine.

~~8 Textbooks of this country to Doctors~~

been ascribed wholly to education, but
I cannot subscribe to this Opinion
There is a natural & original diffe=
=rence between the mind of a woman
& of a man as certainly as there
is between their bodies. The difference
between the male & female mind
consists
in the understanding. It is less
vigorous and less comprehensive in the
female than in the male sex. hence a
Newton, a Bacon, and a Napier has never appeared among
women. 2 The same may be said of their ima=
=ginations. Nor among poets has
Homer, a Shakespear & a Milton
has never appeared among them.
3 In memory they excel men in
the retention of words & events, but

V of this memories in retaining
events, a women have sometimes
been called Almanacs. The events
they treasure up in their memories
with the most care are, such as are
associated with pairs, particularly
by with childbearing. This capacity
for retaining the remembrance of
births has been taken notice of by
Lawyers, who consider the testimony
of women in Courts as far as it
relates to births, as more correct
than that of Men. — The predominance
of memory in the female sex is further
illustrated by the practice of the Indians
who commit all their traditions to their
women. The

they are inferior to them in the retention of ideas. From the uncommon correctness & strength of
~~their imagination~~
4 They are superior to men in ~~quickness of~~ taste - hence they are better judges of than men, of propriety in dress and behaviour - and hence the manners of young gentlemen are so easily, and so universally polished by keeping their company. — It is from the superiority of their taste that they are more disposed to imitation than men.
5th Their moral faculties are more acute and are more sensible than men. — Destined to live more alone than men, and precluded by custom or perhaps nature from making a choice in ~~the affairs~~ of matrimony, they are

One of the Daughters of Dr Cullen informed me that
her mother
~~the daughters of Dr Cullen~~ could tell the events
& acts of every day of her life for many
years. —

in our Country
≠ Indian Women, discover hostile designs to traders,
& prisoners, but no instance has ever occurred of
this being done by a man.

has been
V It ~~was~~ remarked as a proof of the greater
kindness of women, than men that
our Saviour was never once insulted by
a woman during his residence ~~of~~ in
~~on~~ our world;— On the contrary he
was uniformly treated by them with
respect and kindness. Baron Humboldt
informed me that he saw a tribe of Indians in
S America who killed all their visibly & deformed Child:
but this was always done by men never by Wo:
=men. Lichyard — Cook used to Praise all Countries in
~~he~~ homage to the humanity of ~~Savages~~ women even
Among Savage Nations. ≠ will therefore did

fitted for their solitary situation by
a more exquisite sense of Deity - hence
women in all ages have been more

devout than Men.

The moral faculty, as far as it relates to certain objects is moreover more active in women than in men, but circumscribed in its ~~sub~~ operations. — Women ~~are~~ more kindness, more humanity & charity than men, less ~~ostentatious~~ turbulence. They are kind ~~&~~ relations & neighbours, but how seldom do we meet with a female citizen of the World.[2] —

~~In~~ Conscience in women is perhaps less sensible than in men only because

an elegant french writer say of the whole sex. "they ~~are~~ afford the most pleasure ~~to~~ in middle life, and they are the ~~best~~ principal supports of its two extremities, viz infancy and old age."

V They are more inclined to Despair in sickness and Danger than men. Sir Wm. Hamilton has furnished a striking proof of the correctness of this fact in his description of the effects of an earthquake at Calabria that ~~destroyed~~ buried 1500 people alive in the earth. The women were found with their arms folded, as if resigned at once to their fate - the men were found with their arms extended as if they had struggled to the last, to save their lives. ~~Many~~ Mothers despair sooner of their children than fathers ~~do~~ of their husbands & wives. Sickness is ~~a~~ of great consequence to ~~women~~ Mrs Ward & Mrs Rivers

~~they~~ it is seldom excited to act with
the force with which its Acts in men. By
~~education & customs~~ education & customs, they
are restrained from all gross vices which
seem necessary to ~~to the~~ give liquor, and
sensibility to
~~sensibility to the~~ conscience, — and hence
perhaps one reason, why they are
supposed to possess less of the delicacy
of Veracity than men. — There is
another reason for it given by Mr Hume
and that it is the habits of dissimulation
which are early imposed upon their
passions by the delicate customs of civi=
=lized life. Perhaps a better reason may be given
than either, "the want of
Humanity attaches less Dishonour to their characters" that it does
to the Characters of men.
per the Operations of the mind, bo=
=men differ from men. They have

IX. The greater quickness of their Conceptions is evidant in the greater facility with which they understand Signs instead of Language. M^r Lawson says in his northern Journey the Women of Denmark understood him by 1/3^d of the Signs less than the Men of that Country.

V They are more communicative of Secrets than men - but it is the Secrets of Other people - not their own. Men on the contrary divulge their own Secrets; - but more faithfully keep the Secrets of Other people.

They are less disposed to forgive injuries than men. This is the effect of weakness only - for strong and great minds are elevated above revenge. "Women and men like Women (says Burnius) are timid, vindictive & irresolute". They are less subject to the influence of the venereal appetite than men. They possess more delicacy and modesty than men. This

quicker perceptions, ~~[illegible]~~, but
their judgements and reasoning powers
are less acute and extensive than those
of men. — IX

~~[illegible]~~

They have more fortitude, but less
courage than men. The former is a
passive — the latter an active quality
of the mind. — Perhaps the reason why the want of
courage is so conspicuous among them may be it attaches
less dishonour to their faults, as it does to those
they include more to society than
of men.
men — hence we find they are most

prone to institute a [illegible] society when they
dispose them to call [illegible] visit alone
visit plays, & while man always
It has been doubted whether this superior

delicacy & modesty ~~[illegible]~~

~~[illegible]~~ be owing to nature or education.
I believe it to be owing to nature, for
I have seen it in so early a period in

⊙ ~~The poet~~ Ariosto who is not more remarkable for the extravagant sublimity of his poetry, than for the correctness of his philosophy of the human mind, ~~so~~ bears a striking testimony to the quickness of this ~~operations~~ perception of the ~~female~~ minds of women in the following lines in his Orlando furioso.

" Amids the various gifts by heaven assigned,
" With special grace enriched the female mind.
" Be this their praise; where most the sex aspires,
" To counsel well, when sudden exigencies
" Cut off debate, or nature dictate advice
" When time, the means of long debate supplies.

Book 27.

This I took notice formerly, that

perception was weakened by the constant ex-
=ercises of judgment & reasoning. Perhaps
this may be the reason why the women
excel the men in quickness of per=
=ception, from their duties in life re=
=quiring up of the above abstract exercises
of the mind. For the same reason, Child-
=ren and the Vulgar are better judges
of likenesses in painting than persons
comparing
who are in the habits of judging, and
reasoning upon such Objects. But certain
Dumb Animals and even Children & the
Vulgar in quickness of perception. Birds
have pecked at painted grapes, & a dog
has jumped into a ~~painted~~ a flow Cloath
upon which the sea was painted in order
to swim in it.

V The notion started by the ingenious and eloquent female Author of the rights of Women - that all the Different Between the talents & virtues of the two sexes is the effect of education, is as hypothetical ~~a~~ as Helvetius's notion of all the Variety in human talents depending on the same cause. There is an original difference in the bodies & minds of men & women, stamped upon both in the womb, by the hand of nature. This difference shews itself in Childhood in: =dependant of precept & or example. E.g: who ever saw a boy amuse himself with a doll? or a girl - anticipate riding on horseback - by straddling or riding a stick? — ≠ It has been

female Children, that I am forced
to resolve it into an instinct of Nature,
This instinct is aided in its operations
by the ward of Chastity being attended with more dishonour
in a Woman than a man. I am aware of all the Objections ¶:
may be urged against the line which
I have thus drawn between the male
& female mind. — I grant that there
have been many exceptions to it both
in Ancient & modern times. There have
been exceptions too to the remarks upon
the inferiority of their bodily Strength.
But these exceptions do not affect the
truth of the general Observations which I
have delivered. We find as many female
minds & bodies among men, as we do
masculine minds & bodies among [Women.] ¶

Let not the youthful Champions

when they become vicious
remarked that women have sometimes ex=
=ceeded men in the same Vice — hence the
line of Dr Young "A shameless woman is the
worst of men". The same excep or occurrence
now & then
is takes place in the exercise of the some of the manly
virtues. Eg: a women has sometimes displayed
more courage in danger than a man. The
virtue in this case is convulsive or morbid,
not a natural Operation of the female
mind. They often exceed men in the exercise
of the moral feelings
=onally in their moral qualities, but rarely
perhaps never
in the intellectual qualities of their minds.
a Homer — a Shakespear — a Newton — a Burke
has never yet appeared among the female sex.
It is an error loci — for it does not belong
naturally to Women.
V This is the echo of Revelation
every where
in their preaching the female sex supports
the Opinion which nature thro

for female excellency, I suppose that the opinions which I have delivered are the effects of a ~~long~~ decay in my respect for the female sex brought on by the hand of time. Far from it. Few men ~~have~~ have more reason to admire and love at least ~~one of~~ the sex than I have, but I hold it to be essential to this order and to the happiness of domestic society, that there should exist exactly those degrees of ~~subordination~~ inferiority & Contrast between the two sexes which have been described. The many of the disorders not only of domestic, but of political Society I believe originate in the inversion of this Order. In support of the assertion that

~~Heroides the~~ upon us, and in con-
-sequence ~~thereof~~ thereof is indicatio
protection from the male to the
female sex, and Obedience from the
female sex ~~to~~ the male. ~~For the~~
Government is essential to families,
and ~~which~~ can only exist where there
~~slavery exists~~ there is more or less inequa-
-lity. Point I know but one place
in the Universe where perfect equality
exists ~~and that is in a graveyard~~
among mankind whether in their
political or Domestic relations, and
that is in a graveyard.

in the female sex favourable
inferiority is most ~~essential~~ to love in
two questions. —
Ans — I will only ask — Do parents
love their Children, who are their inferiors,
more than Children love one Another?
and can any degree or conception of
love equal that which the Supreme
Being has manifested to the human
race? —

Having given my opinions on this subject
are not only consonant to reason, &
Observation — but to every part of divine
revelation — I shall make no apology for introduc-
-ing them into a Course of Physiology. But
never
Physician should prescribe for any disease,
~~for the brute~~
~~creation only~~ who has not attended to
the Structure — & peculiarities of the mind

In warm climates at 12 - in cold at
14 & 18, - but so much are they influenced
by heat that in cold countries where
women spend all their time in stove
rooms, they appear at a much earlier
period. — Dr Oiander a German physician
has given us the following curious history of
the ages in which the menses appeared in
137 women lying in hospital at Gottingen.

at 12 years of age	3	at 18	18
at 13	8	at 19	10
at 14	21	at 20	8
at 15	32	at 21	1
at 16	24	at 24	1
at 17	11		38
	99		99
			137.

in both Sexes. We cannot advance a step
~~in the treatment~~ upon ~~pain~~ just principles in treating
the diseases of the mind, without that
this necessary Knowledge.]

From the Organization of the female

Constitution — results that monthly discharge from the
Uterus of females within a certain age
which is called — Catamenia or menses.

I shall now proceed to make a few Observations
upon it. — This monthly discharge from the
Uterus:

1 It is confined to the female of the human
Species only — with an exception perhaps only
of the female monkey, ~~Did not~~.

2 It occurs at different ages in different
climates, and in different Classes of women.
In the middle States of America it generally occurs
about the age of 14. In women in high life

‡ It is remarkable in all these cases of early menstruation, they never return at monthly periods, but often after a few periods the age of puberty. —

V Dr Haller

mentions several cases of its occurring in the first - second - third - & in every subsequent month of infancy. + At the time of the irruption of the menses the breasts swell - the eyes become more brilliant - the voice more musical - and the whole deportment of a woman undergoes an agreeable change. At this time the sexual appetite is more sensibly felt than before.

+ Women who are hard drinkers often menstruate till they are 60.

it occurs ~~on~~ sooner than in women who labour ~~,~~ more especially - if this labor be performed in the Open Air. —— To this re= =mark of the period in which the menses make their first Appearance, - there are many exceptions in books of medicine. I have known three girls in this city under 7 years of age to menstruate. Two of them were in One family. V ~~Instances~~

3 The usual period in which the menses cease is between the 45th & 50th years of life in the middle States. To this there are many exceptions. ~~There is~~ these was a woman lately ~~is~~ living in this city who was Mrs Coxe now 72 who menstruated till She was 50 without the interruption of a single month except when She was with Child or gave Suck. + — There are many cases upon record of women who have had a return of their menses after

+ Eg Wm Sinclair 1795 - aged 70
In the German Epitaph there is
an Acct of a Woman who menstruated
till 90, after ceasing for 40 years. — Dr
Heberden mentions several similar
instances of the return of the menses
in very Old Women.

they have ceased for years in extreme old age. + It is ascribed to the same disposition in the system to renovate itself which appears in the renewal of the teeth - and in the recovery of seeing and hearing, after they have been decayed & lost for years. — I have suspected from all these facts, that the Antidiluvian age was protracted by changes in the system similar to those which go forward in trees, but with this difference that the body renewed its decayed parts once before the flood ~~[illegible]~~ in 80, or 100 years, whereas trees renew their decayed buds and leaves every year. The Renovation of the teeth & the Senses, and the cessation of the menses seem to be efforts of the system to produce an antidiluvian age. + The menses cease sooner in women who labour in the open Air, than in

V 5 The menses generally cease during pregnancy, and the giving of Suck. To the former state of the System there are sometimes exceptions. There are Women who menstruate regularly during pregnancy. The discharge in these cases comes from the Vagina & not from the Uterus. There are exceptions likewise to the latter State of the System. There are women who menstruate during the whole time of their giving Suck. The ordinary cases the menses return about the 11th Month in Nurses — They are a signal that it is time to wean their Children, and to renew the business of childbearing.

6 Women are more irritable, & more susceptible of diseases at this time than in the intervals of menstruation. Their Diseases are moreover more violent at this time than at any other.

women who live easy and indolent lives.

4 The quantity of blood discharged ~~is~~ is ~~from three to~~ ~~5 or 6~~ in our climate.

The time of its ~~continuance~~ is from two to four days.

The time of its recurrence is Once every Lunar Month. The blood which is discharged in a latitude of 2 or 3 degs is in many women has no peculiar smell, or morbid Quality. it was offensive from the influence of this Climate. not

Perhaps among the Jews ~~this~~ were ~~very~~ remarkable for this cleanliness the blood may have had some unwholesome Quality in the Old Islands, & odious hence uncleaan things are compared to a "menstruous Cloath" - and hence too the Strictness with which a connection was forbidden with a menstruous Woman. The Jews to this day who live agreeably to the ceremonies of the Levitical Law - have no connection with their wives - Untill two weeks after they have ~~paid~~ each term of their menstruation. V.

⊙ p 728 taken into the lying in

of ~~460~~ 185 women ~~who conceived~~ ~~the~~

hospital at Gottingen Dr Osiander says

16 did not menstruate after Conception.

8 menstruated once & sparingly.

& twice.

2 three times

1 five times

1 seven times

3 ~~[illegible]~~ ofttimes, from which it appears

that the Cases in which menstruation

takes place in pregnancy are in the

but 23 to that is about 1/8th part.

ratio of 1/162. ~~[illegible]~~ It was remarkable

in no One of the Cases in which

menstruation occured, did ~~[illegible]~~ abortion

or any bad Consequences arise from

it. Take notice of this fact.

Some Women
~~They~~ are able to predict approaching Changes in
the weather just before ~~the~~ each time
of Menstruation. The Pulse is more active &c.
at this time than in ordinary health.
From what has been said, you will
not be surprised at my adding
That menstruation is a Disease,
is so much so that Women often call
it their monthly Disease. The state
of the Uterus, and of the whole System
indicates this to be the case. Morbid
excitement take place in the Uterus during
this period, and often to such a degree as
to prevent the Secretion of menstrual blood,
~~to produce that kind of membrane~~ and in some instances
to produce that kind of membrane which
said formerly was secreted from the
fibrin of the blood. This membrane has
sometimes been mistaken for an embrio of a fetus!
been discharged in Menstruation! It is
& The Menses sometimes continue to flow

Having mentioned the principal facts upon this subject, — we proceed next to inquire into the cause of this peculiar phaenomenon in the female constitution.

This inquiry divides itself into three questions. 1st What purpose is it intended to serve in the system, & 2d what are its original causes? 2 what are the causes of its periodical or monthly recurrence and

1 Dr Brown ascribes the original cause of the Catamenia to the Stimulus of the venereal Appetite. But this is as foreign from truth, as it is from delicacy. It is Observed in women of the most ex-emplary Chastity, and in some cases

You see Lee Gent. another reason why that we are kept alive by disease. The absence of the monthly or ~~natural~~ vital discharge ~~in women~~ as it might be called is follow'd by the most serious consequences in every part of the system—

The ~~[illegible]~~ natural or vital discharges I have mention'd may be compared to the daily changes in the course of the Winds & temperature of the air. They keep it in a healthy state — While

[illegible] Peter's discern
appeared on [illegible]
[illegible] th
[illegible] tremendous hurricanes W:
Do some good, but more frequent-
=ly do great mischief upon
[illegible] upon Scotland.

in many Dioceses ~~[illegible]~~ in mania - & particularly in Scotia & Consumption and that too when the patient is confined. Ra: = mania members are instance of a Man who was confined to her bed 10 years. & who notwithstanding had her catamenia every month. she often met them in fevers of every grade. -

The discharge of this blood becomes from habit essential to good health - Even when it is obstructed in the Uterus, it passes off by the lungs, stomach, Hemorrhoids, nose, ears, breasts, ~~[illegible]~~ even the little fingers &

Again such is the effect of habit upon the System, that the menses have been obstructed for six or seven years, Women sometimes enjoy good health.

in Women who are so far debilitated by disease, as to be below the stimulus of sensual desires. But it may be said that in these women it continues for habit after the extinction of the Uterine appetite, - But how shall we account for this discharge appearing at regular periods in women who are afflicted with Cancer, and in whom the disease had made its appearance before the usual time of the breaking out of the menses?

a 2nd opinion of the original cause of this evacuation is, that it arises from a ferment in the Uterus. This opinion is founded on a supposed morbid

— by the Laxity of y^r Fibres
by their sedentary Lives
To this, ~~the~~ women are always disposed
by their perspiring Lips than men.

quality in the menstrual blood,
but we before proved that no ~~[illegible]~~
change took place in the blood in healthy
and cleanly women.

3 Some have supposed that there was
a Sinus in the Uterus in w^h blood was
congested, ~~[illegible]~~ previously to its being dis-
charged. But Anatomical injections
clearly prove that the supposed sinus in
the Uterus is ~~[illegible]~~ nothing but a distention
of the Veins from pregnancy.

4 4^th Original cause is = plethora^v.
In this opinion all modern Physiol^s
(Dr Brown excepted) unite, - the only
Controversy ~~[illegible]~~ between them on this

Subject is, this plethora-general, or
confined to the Uterus alone? I am
disposed to ascribe it to both. ~~I~~ That
it is general - I infer from the peculiar
laxity ~~of~~ of the Arteries in the female
Constitution. This laxity when it
occurs in
women never fails to produce plethora.

2 From the excess being discharged
in many cases from the lungs, the stomach,
the hemorrhoidal vessels, the breasts, even
the eyes, - from the legs & from the tips of
the fingers all of which are connected
with the whole system. Thus we see vicarious
services by the members of the same system. via the blood vessels.

3 From certain diseases which debili-
-tate the whole body, producing a dis-
-position of the excess. To this I know

it may be objected - that in the pulmonic
consumption the menses often continue
till the last month of life, - But it should
be remembered here that this disorder is
often attended with that degree of inflam=
=matory action which disposes to hemorrhage
even
in its last stage. The appetite moreover
is frequently unimpaired in this
disease - of course the production of blood
continues as in perfect health.

4th I infer it - from the female con=
=stitution being more predisposed to
inflammable diseases than the male,
- more especially in a few days
before & during the time of menstruation.
5th - I infer it from the symptoms which

I have felt, and observed this in several instances. —

precede [redacted] the first irruption, &
which attend - every subsequent discharge
of the menses. They are such as attend
plethora, or congestion of the whole system.

I grant that blood letting does not
in many cases, prevent the monthly
discharge of the menses — But this
proves nothing, - for [redacted] the capacity isn't
by bleeding I believe
in the Sanguiferous system, [redacted]
[redacted] rather disposes [redacted]
to plethora than otherwise.

Previously to the discharge of the
menses, the plethora appears to be confined
to the Uterus. no more happens here than
what happens in the Hæmoptysis.
The plethora which produces this discharge
is first general, then partial. The [redacted]

I distended with blood, and even thicker
at this time than any other. The discharge
is from the Uterus, & not from the arteries of the its veins
[redacted] as has been supposed by
Dr Monro. It is remarkable that the
veins of the Uterus in five cases exa-
mined by Dr Monro had no Valves.
The blood discharged at its natural periods does not coagulate,
from which [redacted] it has been supposed
to be a Secretion; — but it is remarkable
that which is discharged by disease coagulates
soon after it comes in contact with
the Air. This fact was first taken notice
of by Mr John Hunter.

discharge of the menses therefore may
be considered as a Hemoptysis from the
Uterus. — The Uterus is always found more V
be come neat to inquire into the
cause of the periodical flux of the menses.
— It cannot be the Moon Otherwise all wo=
=men would have their menses at the
same time. — It wouth seems to be
necessary to produce the usual quantity
of dispersperous blood. The recurrence
of the discharge at an exact periodical
day must be ascribed to the influence of
Association of ideas and emotions to be
considered hereafter. —

3rd
The last question is — what purpose
is this evacuation intended to serve in
the female System. The common

answer to this Question is - that it is intended to furnish the first nourishment for the fœtus in utero. To this there are three Objections. 1 We see nothing analogous to it in the females of brute Animals, the female monkey only has blood retained excepted. 2 the Quantity of blood (if we may judge by what is discharged) is too inconsiderable for that purpose - being seldom more than ℥36 in the whole period of pregnancy. — 3 many women bear Children - before & after enumeration. Of this Dr Hunter used to apprise his pupils that he had known several instances in his extensive Obstetrical practice. Dr Hall (L Dr Moseley) mentions the same confirmations of the same fact.

v Dr Velpeau says he has known
a Conception to take place, where men-
=struation had ~~taken place~~ occured last twice in
the Course of a year & Lawson mentions
many cases of Conception in which it had never taken place.
I acknowledge that I place less dependance
upon this last argument - than upon the
two former ones - as all the cases that
have been affirmed to of Conception during
the Absence of menstruation appear to be
deviations from a law of Nature - nor
are we certain that the absence is real.
~~a pulsus of the Uterine~~ vessels may take place,
& blood be discharged, but in such small
Quantities as to be taken up by the absorbents
before it can pass thro the Vagina. What
makes this probable - is - that women who
conceive ~~[illegible]~~ under the above circumstances
generally enjoy good health.

Nor is this all. Pregnancy takes place
under the circumstances of an habitual
Obstruction of the menses. Of this I have
known an instance in a ~~[illegible]~~ woman,
~~[illegible]~~ in this ~~[illegible]~~ state - who has borne
a child after an unfruitful marriage
of 15 years, and after ~~[illegible]~~ an Obstruction
of the menses of three months duration.

Upon all controverted subjects - I feel
as if silence or indecision would be construed
into cowardice - or a preference of a safe
reputation, to the love of Science. Upon
this subject therefore I will venture an
opinion. -

Brutes ~~[illegible]~~ feel the venereal appe-
-tite at certain Seasons only - most of ym
feel it in the Spring. - At this time there
is a swelling of the Utabus &
is a discharge from their Virginas of a

v impanted to the Uterus in an equal
degree by the distension ✕ in parturition —
hence many female brutes receive the
embraces of the male the next day,
& some the next hour after they are
delivered of their young. —

Again. The Uterus of a Bitch, Sheep and
many other Animals discovers marks of
inflam" about the time they feel
the Venereal Appetite. Haller Vol 8. p. 13 &
Bitches days many of them drop blood from the Uterus at
their rutting time.

† a humor distills from the Uterus
in Hysteromania, and women become
highly libidinous in the beginning of
a gonorrhœa. Ib. p. 74.

mucous matter — & in some instances
of blood. — The design of this afflux of humors
to the womb,
seems to be to impart a sensibility to
the Uterine vessels which disposes them to
Tumefaction, and probably increases
the pleasure of coition. This sensibility is
now Women who feel the venereal
appetite alike at all seasons of the year.
are provided with a monthly discharge
which serves the same purpose of
disposing them to venery, and probably
increases the chance of conception
from Coition. + —
There are two facts taken notice
by Dr Stanley which favour this con-
-jecture — and that is that women

+ out of 100 births Dr Bourhaave says 99 happ:
=pen in the 9th month from the end of men:
=struation reckoning from thence forward
9 months of gestation. — The Uterus is then
said to be less closed than usual, ~~so that it~~
~~can~~ who give suck ~~are~~ seldom become
pregnant Untill after they have had
One or two monthly evacuations.

But further - Dr Haney takes notice that
the female
the organs of generation in mice & moles

& some Other animals - disappear in such
during the intervals of their pregnancy,
a manner that it is difficult to distin:
=guish the male from the female by dispecting
every
their respective Organs of
generation, - now no such thing ob2
=tains in the female of the human
Species. The Uterus is uniformly about
the Size of a pear during the long period of
menstruation;
- But it is remarkable that before
in Virgins
menstruation it is no larger than a
bean, and after it - in old women it

are more apt to become pregnant
from a sexual connection immediately
before or
after menstruation than at any other
time +. — To this we may add that women

I should have no hesitation in ris-
-calcating this opinion, did not one fact
militate a little against it — and that
is, that women become pregnant before
the menses appear, & after they cease — also
during their Obstruction. — Cases of this
kind are however rare — and when they
occur, (supposing no internal discharge to take place)
are not greater departures from
the order & laws of nature, than occurs
in other parts of the animal Oeconomy
both in health & in disease. — The
equal departure from a law of nature

I shrinks considerably and appears to be
destitute of arteries & veins.

There is one more fact which I
mentioned formerly that will adds some
weight to this argument, & this is that
the mineral appetite is first felt about
the time of the eruption of the menses.

happens when female brutes conceive
at any other season of the year than in the
Spring, - and yet this all Sayers know happens
occasionally among sexual domestic
Animals. — But a greater departure
from a Law of nature happens in those
cases where women menstruate during
the time of their pregnancy, & this is not
supposed to be the least Objection to
the Opinion of the menstrual blood
being intended to nourish the fœtus
by those who maintain that Doctrine.

I have not been able to discover whether
the female monkey admits the embraces
of the male alike at all seasons of the year. But
all naturalists describe the male
as being under a constant impulse

of venereal appetite - from which it is most probable the female feels her portion of it alike at all Seasons of the year. If this should be true - I shall have no difficulty in believing that the only use of the men- strual flux is to excite occasionally that fulness - tension - sensibility - and patulency in the female Organs of Generation which are essential to Conception.

much has been said of Hermaphrodites - that is of the male & female Organs existing in the same person - But there is no foundation for this Opinion. Such creatures do not exist among red blood Animals. They are met with only among the lowest class of Animals. Scarcely Snails. Each has y Organs of Generation of both sexes - but they are excited to venery, by frictions against each other.

Of the peculiarities of the male Constitution. —

Upon this subject little remains to be said — for all the general Observations which I have delivered upon the Animal Economy, apply to the male Constitution — and most of such as did not, were mentioned in the last Lecture. The only peculiarities to be taken notice of are the Organs of Generation, and the changes which takes place at puberty in the System in Consequence of the Secretion of the Semen Masculinum. —

I refer you to Anatomy for a discription of the male Organs of Generation.

V This change in the male Constitution
occurs usually about 14th year - But there are
many instances on record of its occurring
at a much earlier period . Dr Hall relates
one of a Boy who had a beard (one
of the Signs of puberty) at 3, and another
who at 4 years of age, had a coarse voice,
great strength (10 pounds, & that he had 50 lbs) as well
and appeared in every respect to be
marriageable. ——

The Changes which occurs at the age of puberty are - an enlargement of the bones of the nose - a fuller bust - a spreading of the breast - a coarse voice (called the 14 years old cold) - a beard - emptions on the skin & rash - and sensual desires. - after the weakness which these sudden changes induce wears away, the system becomes more robust, and the mind acquires with the body, a vigor, - and firmness, it never before.

This revolution in the body and mind of the male, has been uniformly ascribed to the absorption of the semen, and to its stimulus upon every part of the body. — The arguments in

favor of this Opinion are derived from the Absence of these changes in Eunuchs & all other castrated animals, and from the number of Lymphatics ~~[illegible]~~ which open in the Inguinal Glands. — These facts cannot be contradicted, but the Absence of the change in the former case, and the number of the Lymphatics can be accounted for upon other principles.

The 3d Objection I shall make to this Opinion is, that it is entirely hypothetical — not a particle of fact having ever been discovered in any of those parts of the body which it has been supposed to influence in their growth

or newly acquired properties.

2. I conceive all the changes in the System may be accounted for, from the Stimulus of the Seed in the seminal vesicles, and from the intimate connexion of those vesicles with every part of the System. The activity of the Seed as a stimulus may be easily conceived from its having produced in some instances not only madness, but death from its retention and irritation upon the seminal vesicles. The connection of these vesicles with the whole System is abundantly evident from the eyes - the ears - and the sense of touch being all avenues to unusual impressions upon

thus. Even the nose conveys a stimu-
-lus to the Seminal vesicles in some
animals. This has been observed often
in the bull and the goat - & several other
Domestic Animals.

3 The Obscure changes of a more important
& extensive nature brought on the
System by a certain State of tension
in two Viscera from which we are sure
there is no absorption of any stimulating
matter. These Viscera are, the Stomach
& the womb. a moderate
portion of Aliment - a few glasses of
Wine - nay - a few drops of Lauda-
-num received in the Stomach, at
once impart vigor - Activity - and
new Strength to every part of the

body, [illegible] long before they can be
supposed to mix with the circulation
either by digestion - or by being absorbed
by the Lymphatic Vessels. - The state of
tension in the Uterus likewise greatly
influences the vigor [illegible] of the whole
System. No one has supposed the men-
-strual blood to be absorbed, & yet no
sooner is the Uterus disturbed with it,
than all those changes are produced in
the System which were taken notice
of at our last Lecture. - But the
alteration in the state of
[illegible] the Uterus in pregnancy
produces still greater changes in the
System. The Stomach is affected with
Nausea - the head is giddy - Syncope is

V But further - we observe a certain state of tension in the feminale system to be connected with the presence of the Ovaria. By extracting them female animals become fat, & lose several of their female qualities. Now we can suppose the tension & vigor of the female ~~system~~ body to depend upon the absorption or diffusion of the contents of the Ovaria thro' the System.

induced in some cases - & above all the
mouth is enlarged - and a color is often
induced in the skin of the face known
by the good women by the name of
Morphia.

To account for these changes
I presume
apart that it is the effect of
no one will
the male semen absorbed &
diffused thro'
the body, & This solution of these phano-
=mena would prove too much, for it
would
make it necessary for the same changes
to occur in every case where semen
is lodged in the Vagina - whereas it
occurs in the only case in which
it should not occur
, that is when the semen
attracted & retained in the Ovaria
is for the
purposes of conception. - V

The Absence of the Changes in Eunuchs
& other castrated Animals may be accounted
for from the Absence of stimulus. The
Shrill voice - timidity - & loss of beard in
Eunuchs are the effects of debility, and
are often brought on by the debility
which follows the Abstraction of many
other stimuli. The loss of impressions on
the ear by deafness produces languor
in every part of the body - The debility of joy produces the shrill and
weak voice in men of the most
robust habits - but what is still more
to our purpose - the sudden relaxation
& emptiness of the Seminal vessels,
for a while merely
produces all the effects of Castration.

- hence the saying of "Omne animal post coitum triste!" - [redacted] no one unduly will ascribe the languor in this case to the abstraction of the semen from the [redacted] Glottis - the brain - and the Chin - limbs - and yet this ought to be the case, if the vigor in those parts was the effect of the absorption & local stimulus of the semen.

Nothing can be inferred from the Number of the lymphatics which open in the seminal Vesicles, but that great pains have been taken to render that liquor as free as possible from Water, or the Lymph of the blood.

The fat, and even increase of

V The same thing happens after the debility induced by fever or nervous fevers.

Size in certain animals after cas-
-tration are the effects of debility which
produces relaxation - hence the vessels
yield more readily to the impulse of
other stimuli. After a while this de-
-bility is removed by exercise, & the ani-
-mal becomes as strong, as before cas-
-tration. This we see every day in the
Ox and the horse. —

The peculiar smell of in certain animals
at the age of puberty may be accounted
for, from the vitiated state of
the perspirable matter imparted to it
by a vigorous circulation - hence we
find this smell most observable in
hard working people. —

V Notwithstanding these Observations ~~[illegible]~~ There is One case in w.ch I believe the Absorption of the male seed takes place - but for very different purposes that those which have been mentioned, as I shall say hereafter

I have constantly Spoken of the matter found in the Seminal Vesicles being the ~~[illegible]~~ the semen or rudiments, or the Secundating ~~[illegible]~~ Stimulus in generation. This opinion ~~[illegible]~~. I am aware that ~~[illegible]~~ is denied by Dr Hunter - & that some pains have been taken to refute it by Dr Doyley in his Inaugural Dissertation published in 1806. The Dr examined the Organs of Generation in a Boar & was unable to find any Connection ~~[illegible]~~ between the Vasa Deferentia,

I conclude therefore that it is most agreeable to the principles of animal life - to analogy - and to facts - to suppose that no changes are induced upon the system by the Absorption of the seed, and that, on the contrary, after the Secretion begins, it is kept up by the vigor returned to the seminal Vessels by the encreased tone of the whole System.

We have now brought the two sexes to that period of life in which they are both fitted to propagate their Species. — In the brute Creation, the birth of the venereal appetite, & the Commerce of the male & female

& the Vesicular Seminales. The liquor found
the liquor in the vesicles totally different ~~from~~ in
Color & consistence from that which is discharged
in a Venereal Connection, & lastly he found
the same liquor in the vesicles of a castrated
as of an uncastrated Hog, from which he
infers that the liquor exists there for other
uses than + has been ascribed to it. Mr Hunter's
facts are still more unfavourable to the old opinion.
B 20. and 22.
I shall read them 1 & 2. For more inform[n]
upon this Subject see his Animal Oconomy. How-
ever the Controversy may be settled,
neither Physic, nor Surgery
it will hereafter influence upon the using practical
Doctrines of Medicine.

are coeval with each other. But the situation of man will not admit of this being the case. The Offspring of most of the brutes find subsistence already pre-pared for them in the air - on the land or in the water, by the bountiful Author of Nature, but very different is the condition of the Offspring of man - hence it is necessary for him to acquire a knowledge of the means of supporting a family of Children before he forms that connection which is intended to produce them. At 16 or 17 in the female, & at 21 in the male - is the earliest period in which marriage should take place. The longer the period is delayed beyond that

those years - the life the System will be injured by Tobacco in the one, & Childbearing in the other case - provided it does not exceed 24 in women and 30 in men. -

However much the Vegetable Repute - tile has been abused for immoral purposes, yet we cannot help admiring the peculiar nature of it in the human Species. - It is so deep seated in our Natures - that no force of reason - or of ~~Laws~~ religion has ever been able to eradicate it. Our Saviour seems to have appealed to the ~~existence & Universality of~~ Depth & necessary Operation of this principle in our natures, when he replied to that Question of

the Pharisees — "It is not good to marry"
(in his answer)
— "There are Eunuchs (said he) which were
so from y^e mothers womb, — and there are
Eunuchs which were made so men
by
& there be Eunuchs which have made y^m
selves such for the kingdom of heaven^sake.
— He that is able to receive this saying, let
him receive it;" — The obvious meaning
of which is that no man can exist
as a man without fucking the Venereal
appetite, and that he cannot indulge
it without sin — unless in a lawful
connection with a woman. The com-
mon mode of perverting this ordinance and
delicate
Argument in favor of
for the opposite purpose of supporting Celebacy
by Catholic & Some

V The text therefore with this interpretation
is one of the strongest Arguments in favor
of ~~[illegible]~~ matrimony being as universal
as venereal desires and an unmutilated
state of the body, and accords perfectly with
the countenance Our Saviour gave to it by
working his first miracle at a wedding. It
But again by calling the sons of his mother by his
reputed father Joseph, his brothers. Had
matrimony ~~[illegible]~~ been in the least degree incom-
-patible with the purity required by the gospel, the
~~[illegible]~~ last person in the world that ought to
have lived in that state was the mother of our
Saviour, and yet we find she her husband lived with Joseph
& bore children by him after her womb
had been consecrated by having given birth
to the Son of God. ~~The [illegible]~~ Children
by ~~her husband [illegible]~~ are called by Our Saviour
'his Brethren'.

is weak both weak
protestant diviñes [illegible]
and [illegible] impious, - for it makes the
Saviour of the world, to recommend a
practice which is not only cruel, but
it were
which, - if [illegible] of universal obligation (as
be it were
it must if just) would tend to exter-
=minate the human race. V—

In every class of life the mineral
exists with more or less force.
appetite [illegible]. There is no condition
so [illegible] depressed by poverty, or slavery
in which the senses are not attracted to
each other by Venereal Desires. —

No
There are [illegible] conditions of the
System in which it is not felt. In
Melancholly — in Hysteria — in Epilepsy

+ Even the ~~[illegible]~~ neighbourhood, and
near approach of death do not ex=
=tinguish the vene Appetite. ~~[illegible]~~
~~the~~ tents ~~[illegible]~~ Within a
few yards of Bush hill, from
in 1793, Ch.
the groans of the dying, were heard
the dead ~~[illegible]~~ seen every hour of the
day, the convalescents from the yellow fever
indulged themselves in the gratification of
this appetite in the most criminal
manner, Mr Gibbon says that in
~~[illegible]~~ an Earthquake which destroyed a
city in the reign of Justinian

especially
palsy
in the convalescent State of fever — in
of such as are called malignant,
Idiotism — and under many Species of
Deformity — man inclines to propagate
his Species. The monstrous Child of 26
near the Passaic Falls in New Jersey
years of age whose history Dr Mitchell
has given us
has expressed a strong desire
for a wife, — and Montaigne mentions
small
a Case of a man in whom the parts
of Generation were so nearly visible,
who had venereal desires. —
always
Even old age does not chill
this appetite. The famous Pope was
convicted of adultery at
120 years of age — and in our daily News
papers till as that men & women

many men were seen committing
rapes upon [redacted] women.
Distracted with fear & terror. In both
these
cases, the venereal appetite must
have been the effect of disease, and
a famous Quaker preacher in his
travels thro Virginia relates that he was
kindly entertained at the house of a
man of the name of Wm Potter who was
92 years of age, who had a child of two
years old by a young wife playing about
his knees. This man died at 107,
and in such good health as to work in his
field till a few weeks before his death.
The human species would soon be
extinct, for Reason, without the
aid of passion, & appetite, would universally

labour to, frequently do homage to this by matrimony
universal stimulus in the human
passion. — It is happy
for the purposes
of heaven, with respect to the destiny of
the human race, — is this appetite so
deeply planted in our natures, as to be
removed beyond the influence of reason —
religion disease — deformity — or
even old age itself —. Unless this were the
case, how could a person of sense
lay pleasing it in the power of a female
companion for life — ? Or who would
deliberately submit to all the certain
trials and contingent distresses of wedded a

revolt at ~~the prospect of~~ solicitude — and
possible having a
~~probable~~ misery of a family of Children.
~~But~~ Happily in this instance, the wisdom
and goodness of the Deity has placed his decrees
of benevolence, and multiplied our happiness,
beyond the influence and powers of man.